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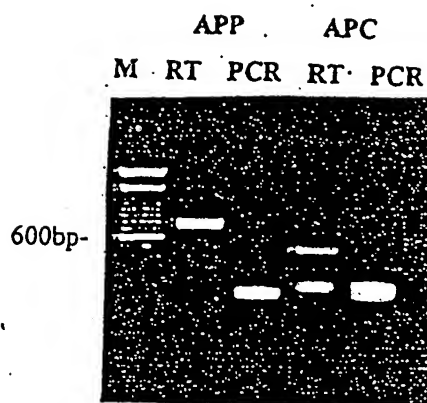
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A



B

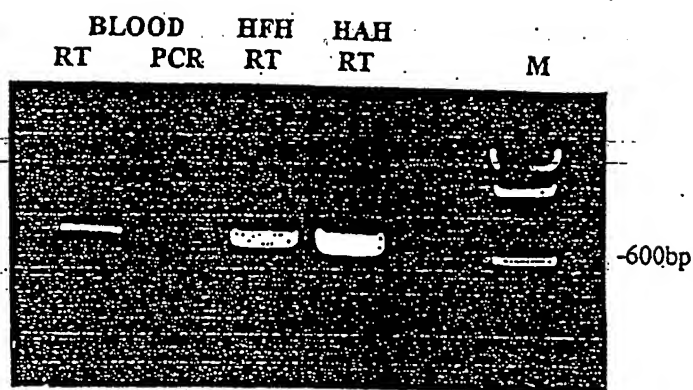


FIGURE 1

1 2 3 4 5 6 7 8



FIGURE 2

1 2 3 4

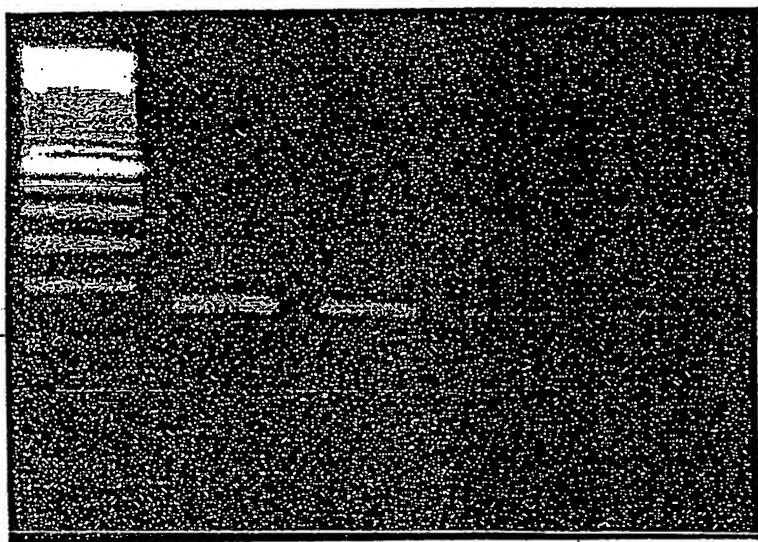


FIGURE 3

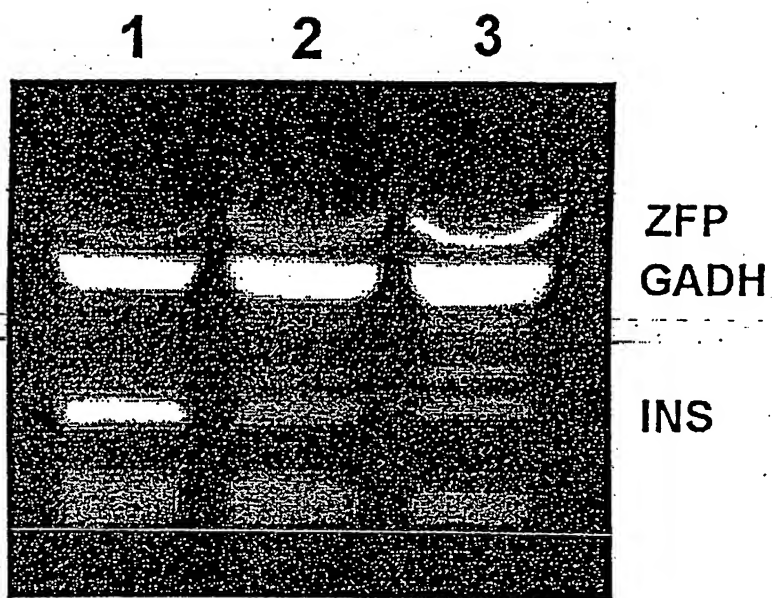
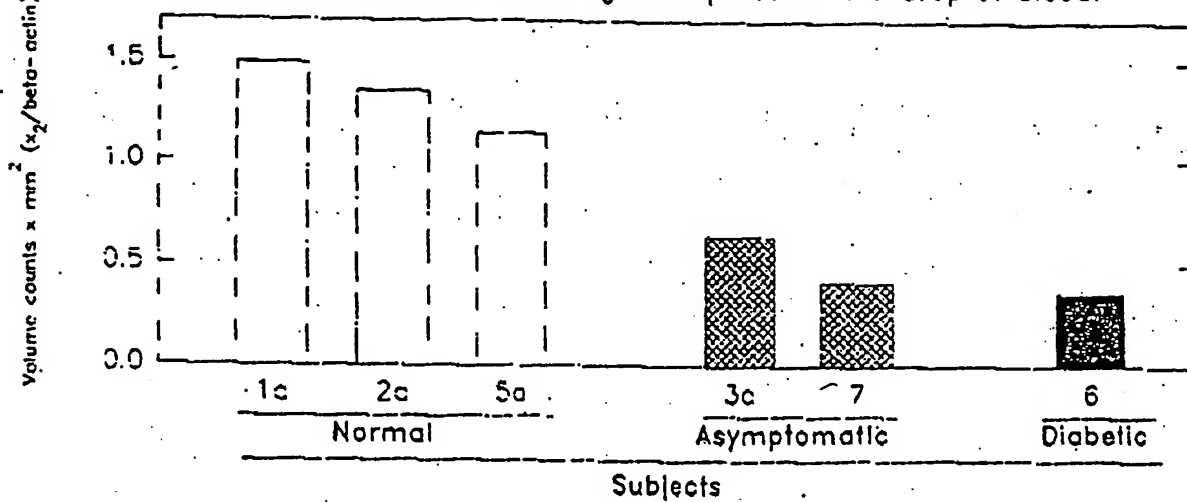


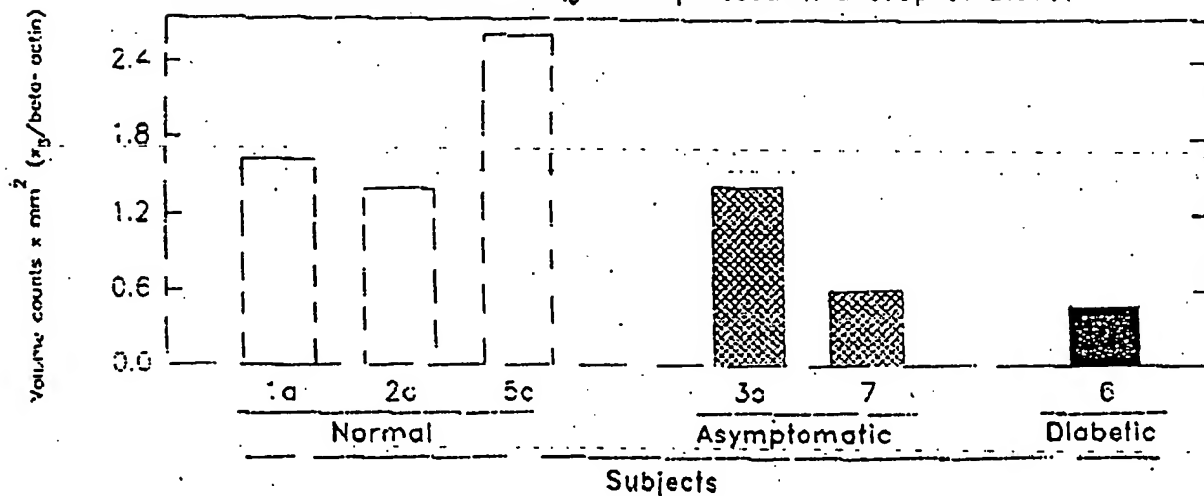
FIGURE 4

A. Standardized levels of Insulin gene expressed in a drop of blood.



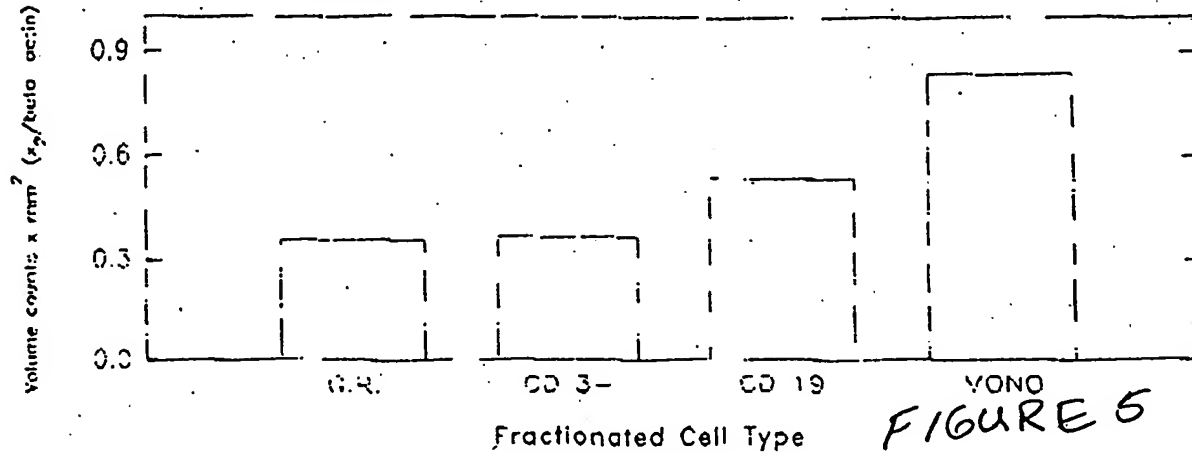
B.

Standardized levels of ZFP gene expressed in a drop of blood.

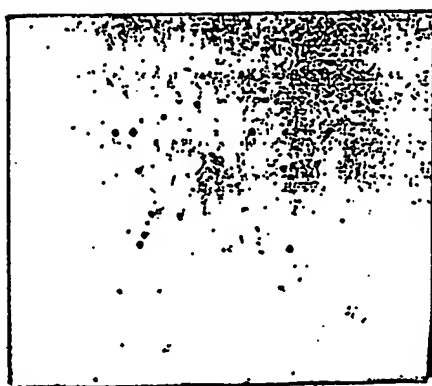


C.

Standardized levels of insulin gene expressed in each fractionated cell from whole blood.



A



B

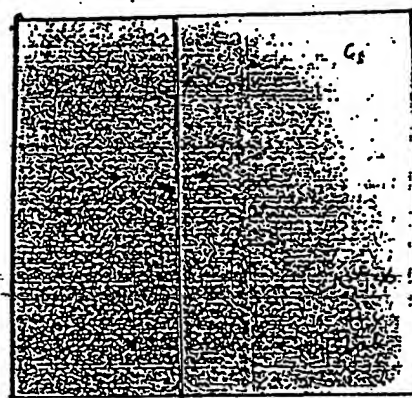
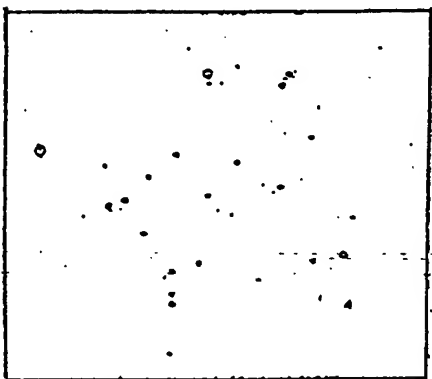
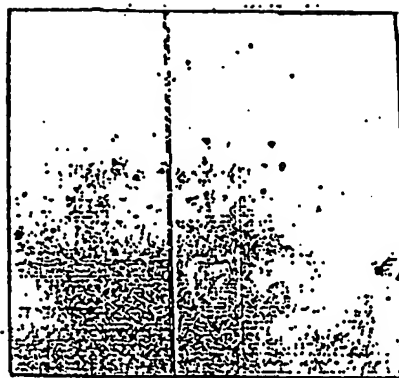
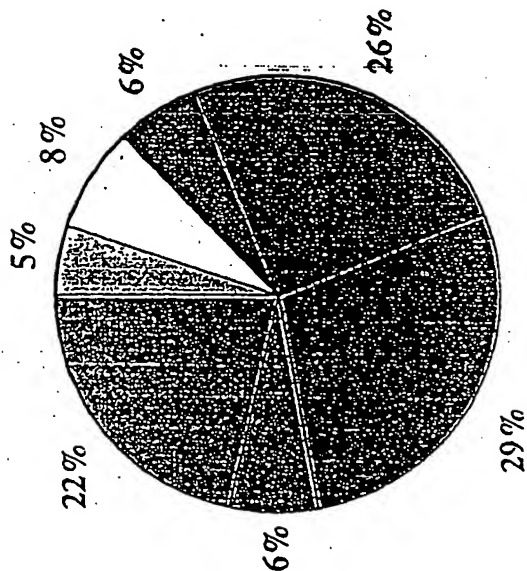


FIGURE 6

Total : 13, 283 ESTs
 Known: 6,283
 Mitochondrial: 405
 Ribosome: 498
 Repeat: 868
 Mis. : 156
 Novel: 2,718

- Cell Division
- Cell Signalling/Communication
- Cell structure/Motility
- Cell/organism defense
- Gene/Protein expression
- Metabolism
- Unclassified

Human Blood



Human Fetal Heart

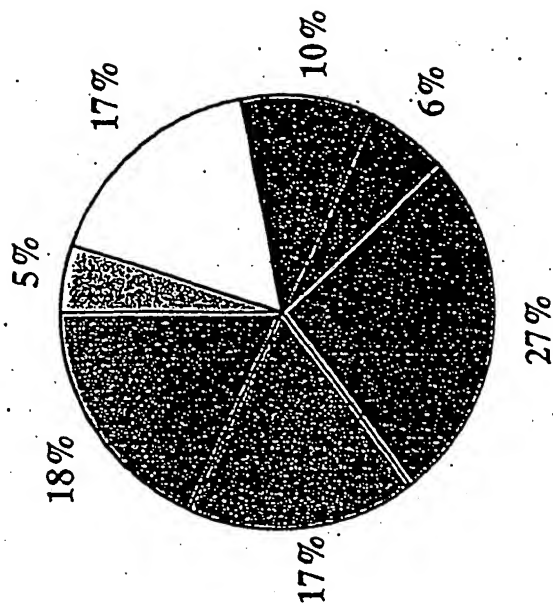
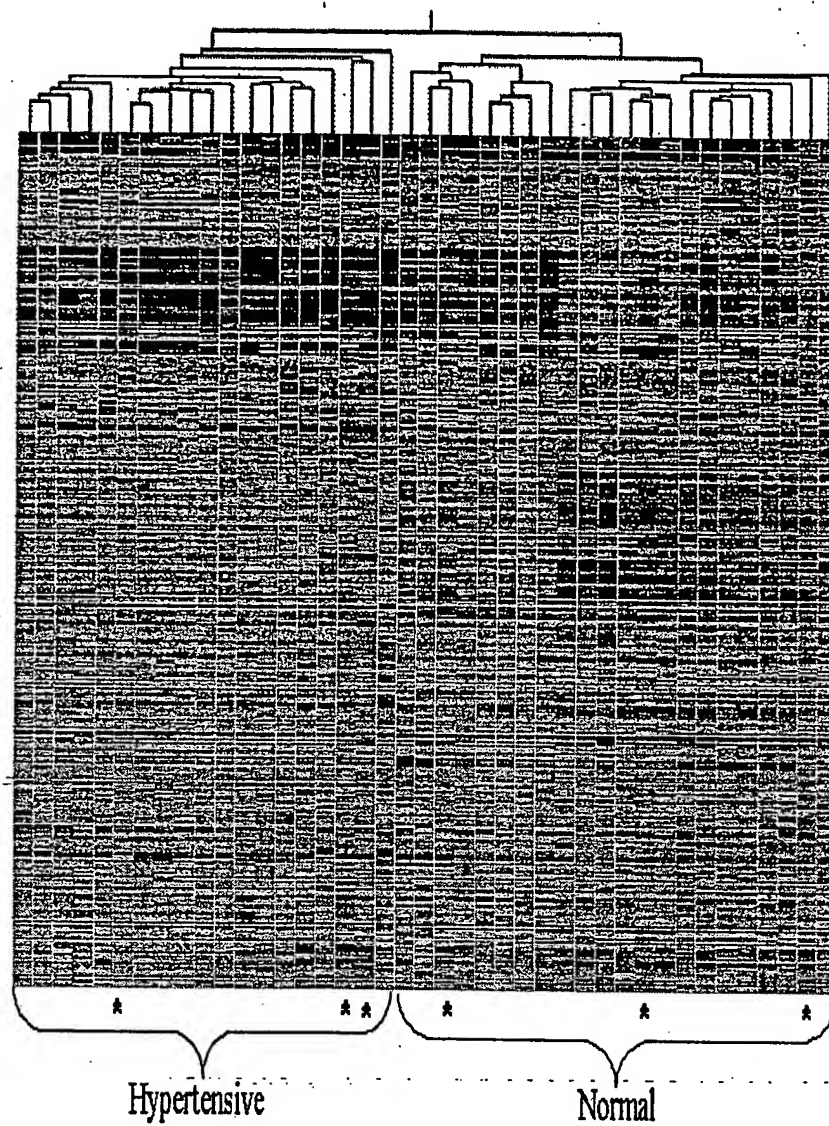


FIGURE 7

Figure 8
Hypertension



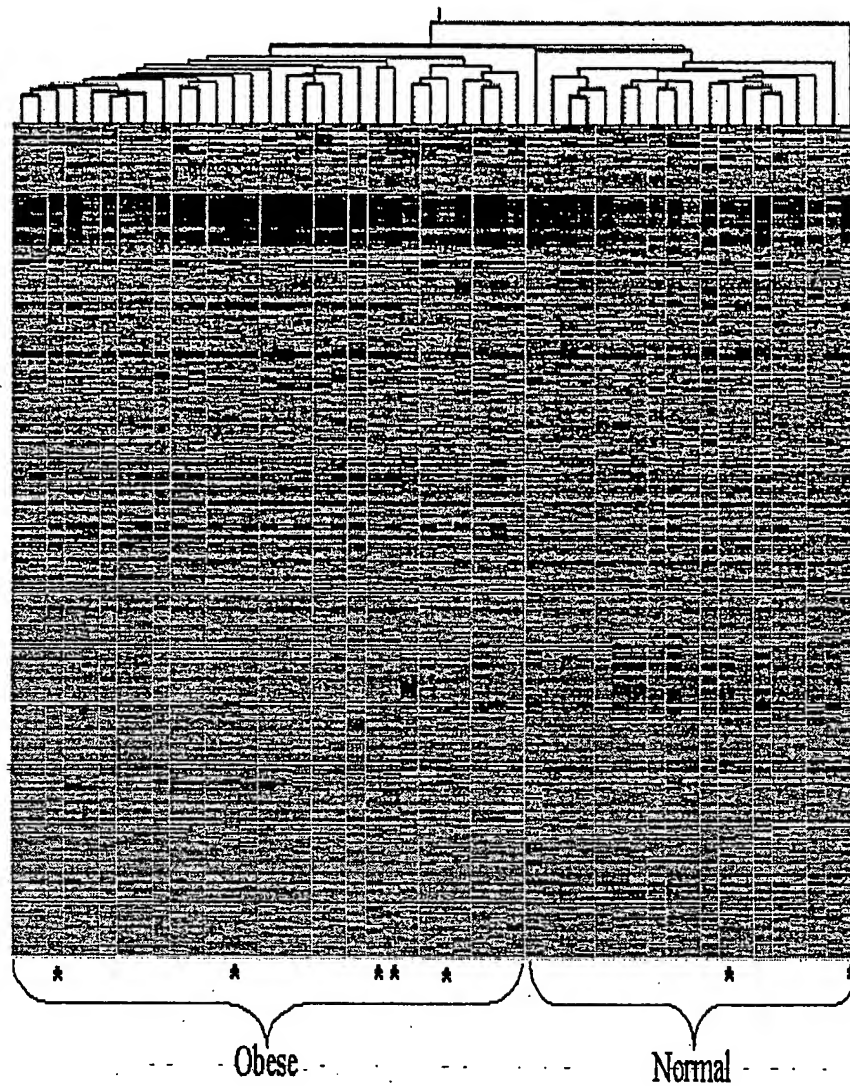
Hypertensive: 19

Normal: 22

Differentially Expressed Genes ($p < 0.05$): 861

Figure 9

Obesity



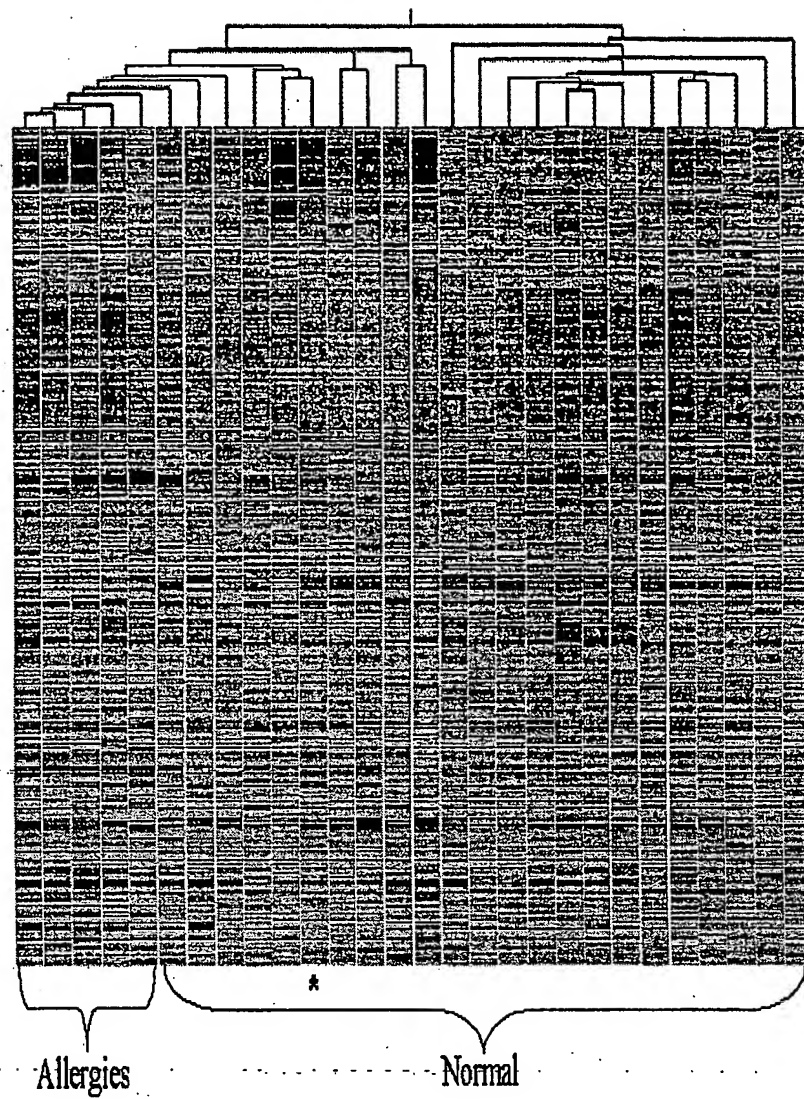
Obese: 25

Normal: 22

Differentially Expressed Genes ($p < 0.05$): 913

Figure 10

Allergies



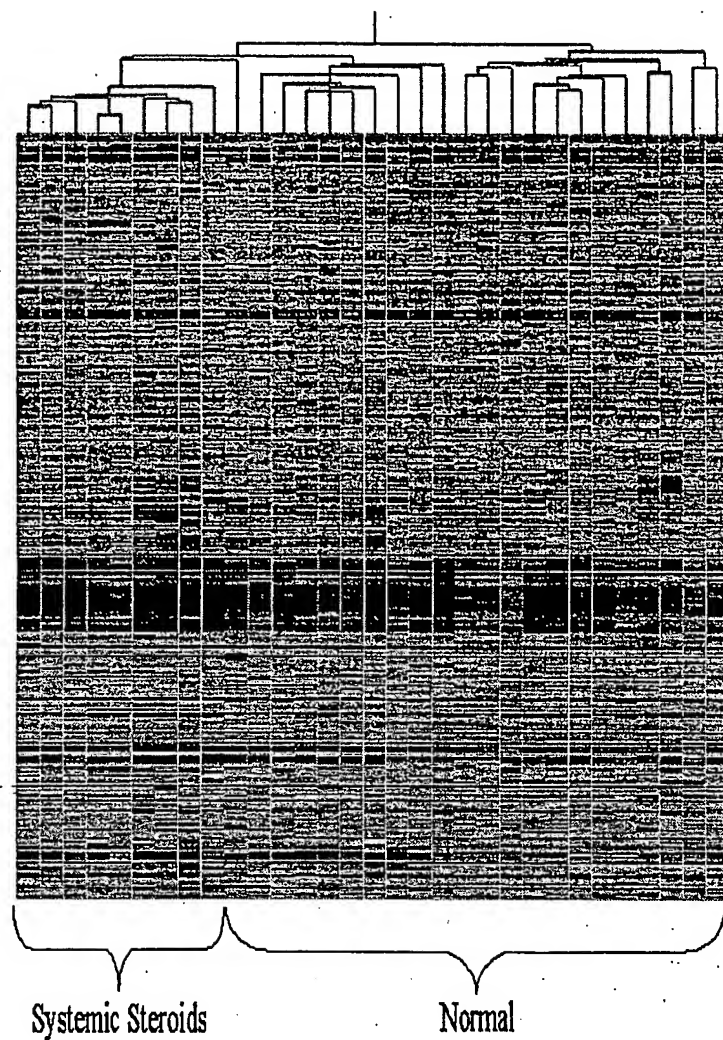
Allergies: 6

Normal: 22

Differentially Expressed Genes ($p < 0.05$): 633

Figure 11

Systemic
Steroids



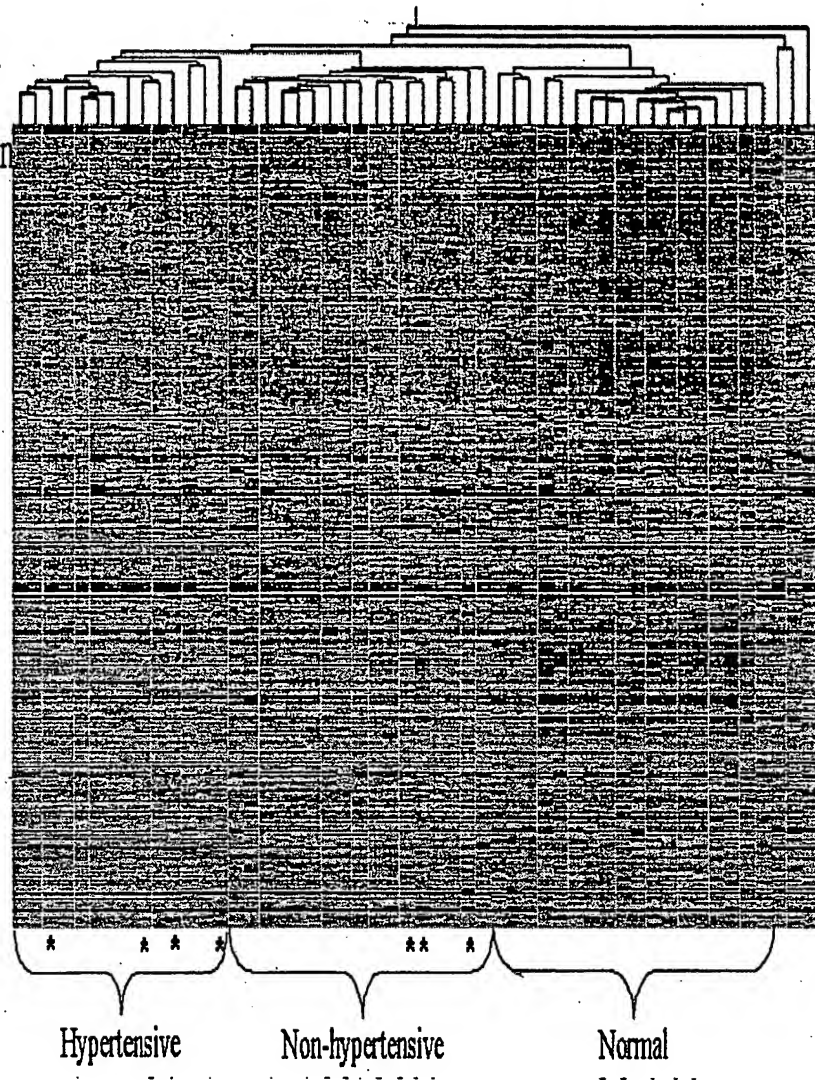
Systemic Steroids: 9

Normal: 22

Differentially Expressed Genes ($p < 0.05$): 605

Figure 12

Hypertension



Hypertensive: 10

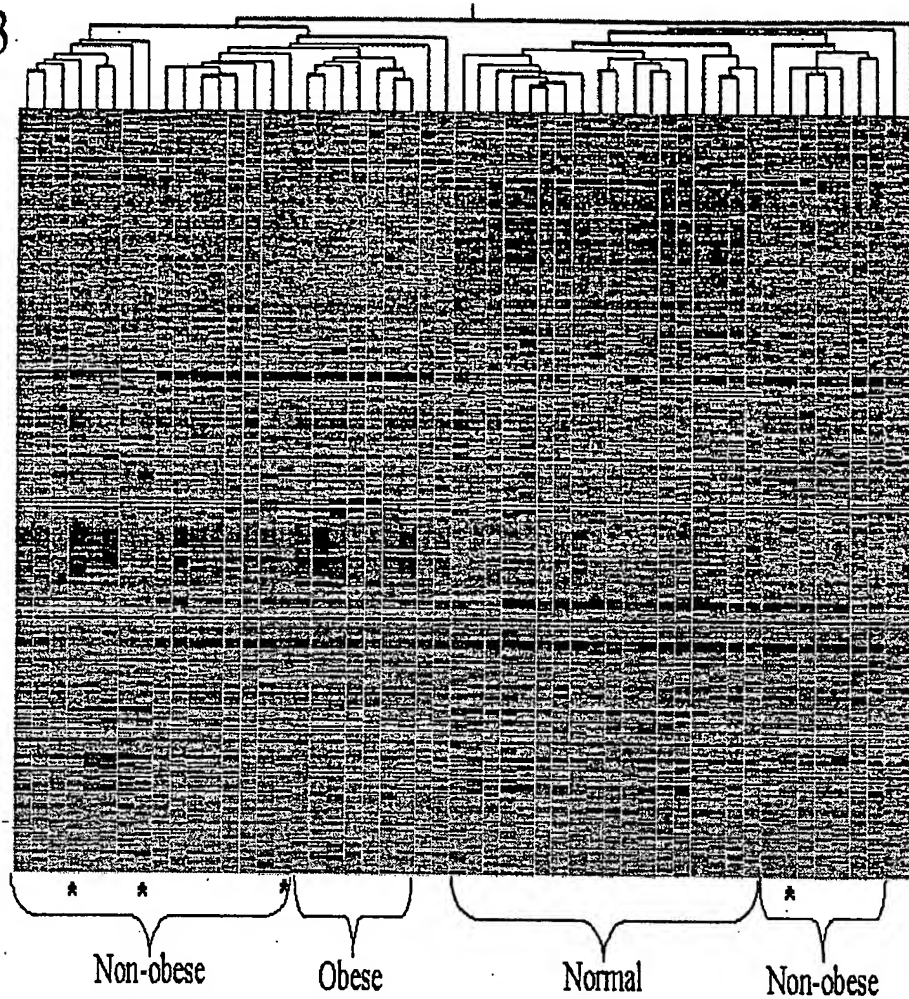
Non-hypertensive: 18

Normal: 24

Differentially Expressed Genes ($p < 0.05$): 1,993

Figure 13

Obesity



Obese: 8

Non-obese: 20

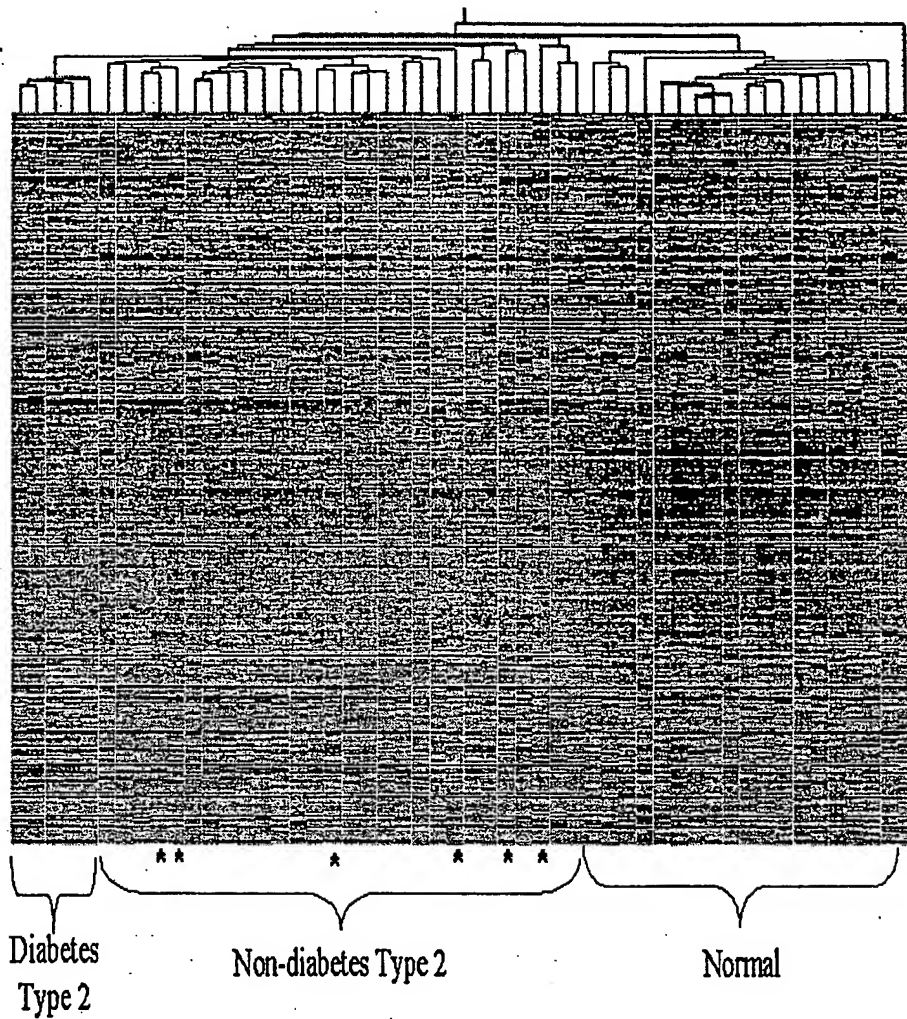
Normal: 24

Differentially Expressed Genes ($p < 0.05$): 1,147

Figure 14

Diabetes

Type 2



Diabetes Type 2: 5

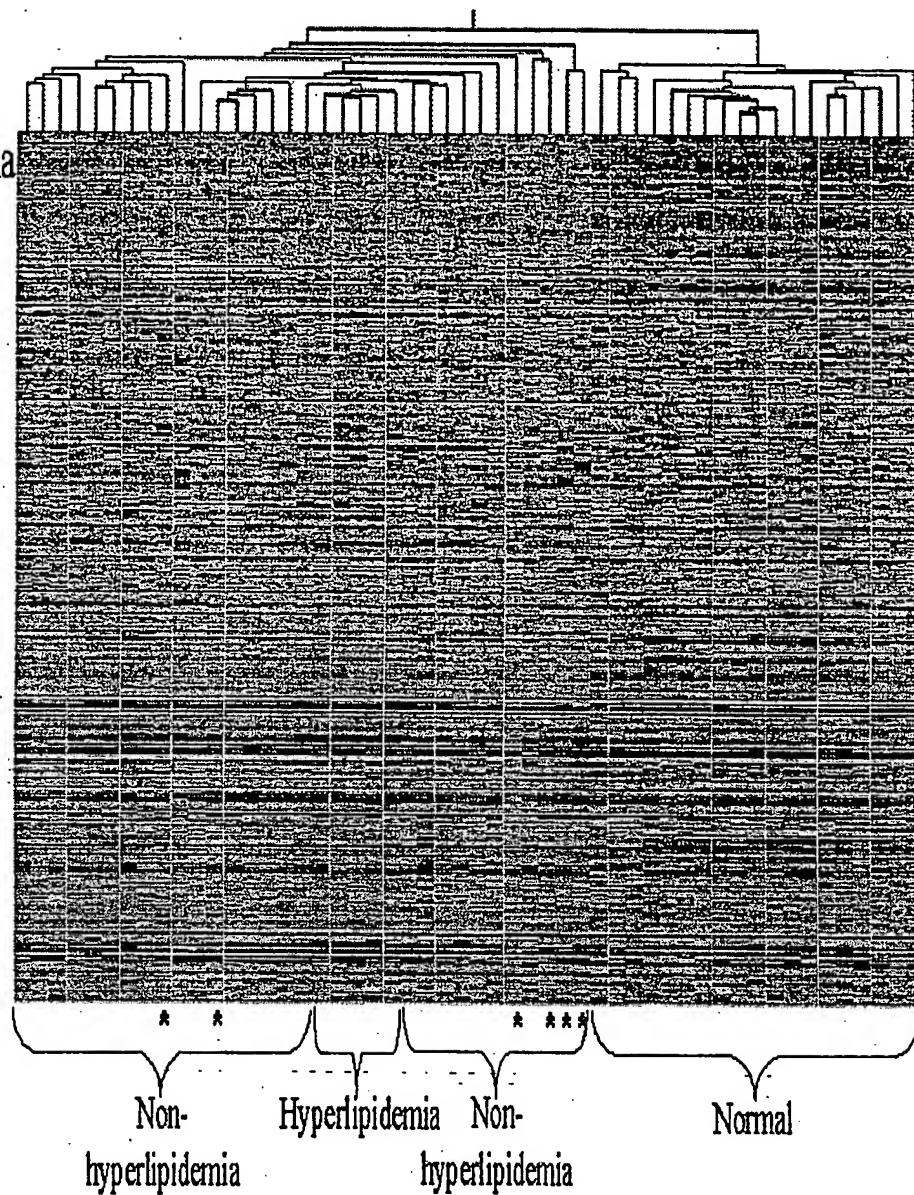
Non-diabetes Type 2: 23

Normal: 24

Differentially Expressed Genes ($p < 0.05$): 915

Figure 15

Hyperlipidemia



Hyperlipidemia: 7

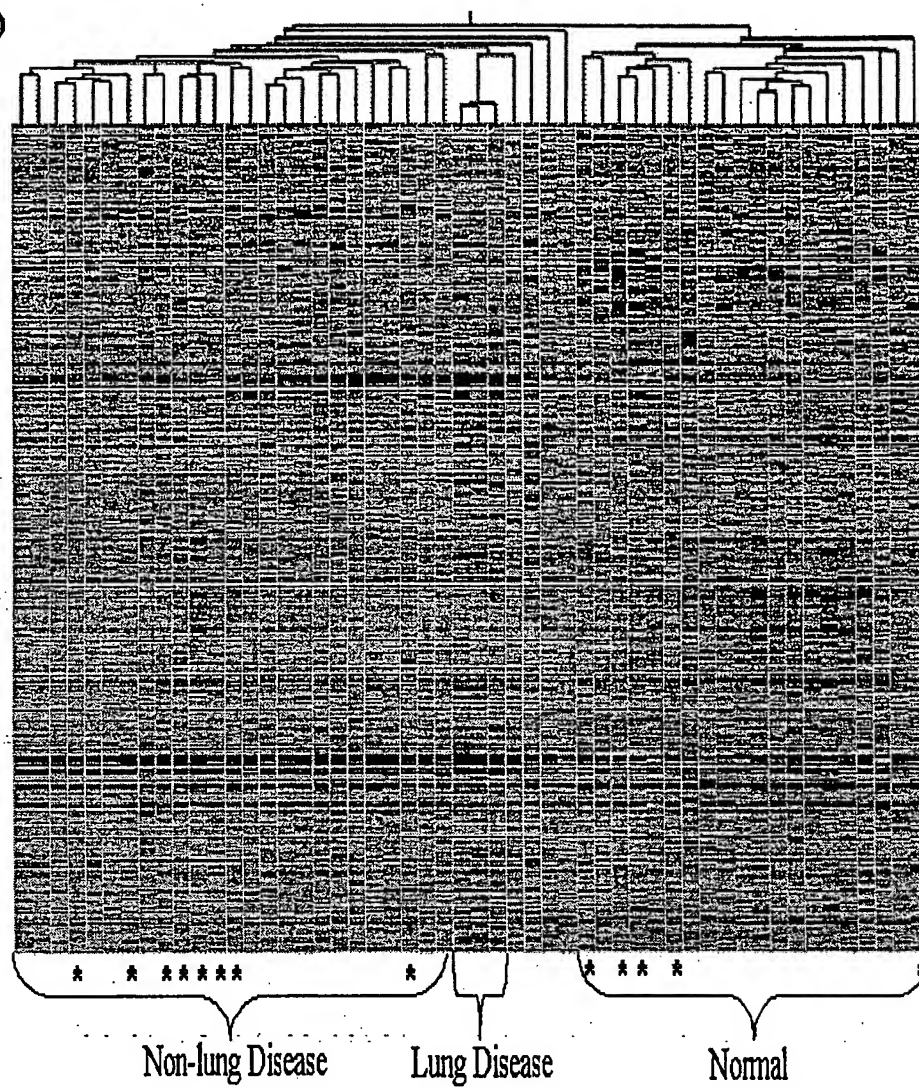
Non-hyperlipidemia: 21

Normal: 24

Differentially Expressed Genes ($p < 0.05$): 1,022

Figure 16

Lung
Disease



Lung Disease: 3

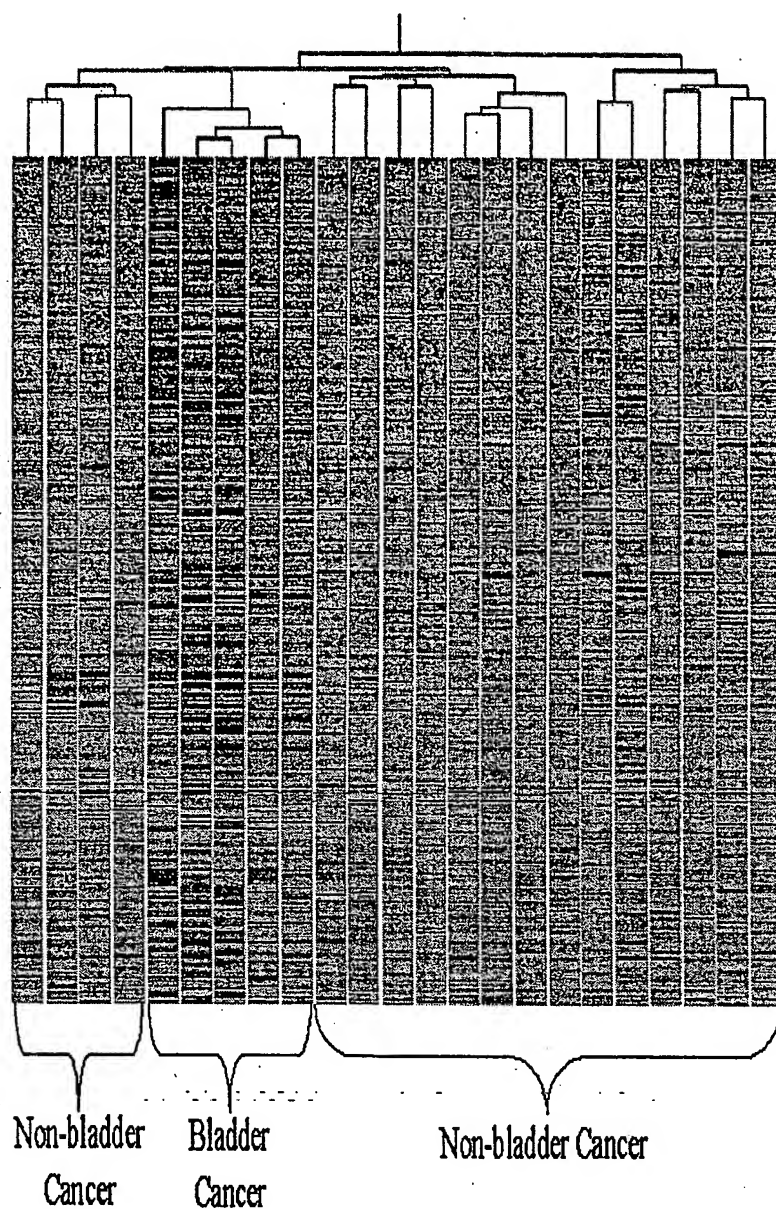
Non-lung Disease: 25

Normal: 24

Differentially Expressed Genes ($p < 0.05$): 596

Figure 17

Bladder
Cancer



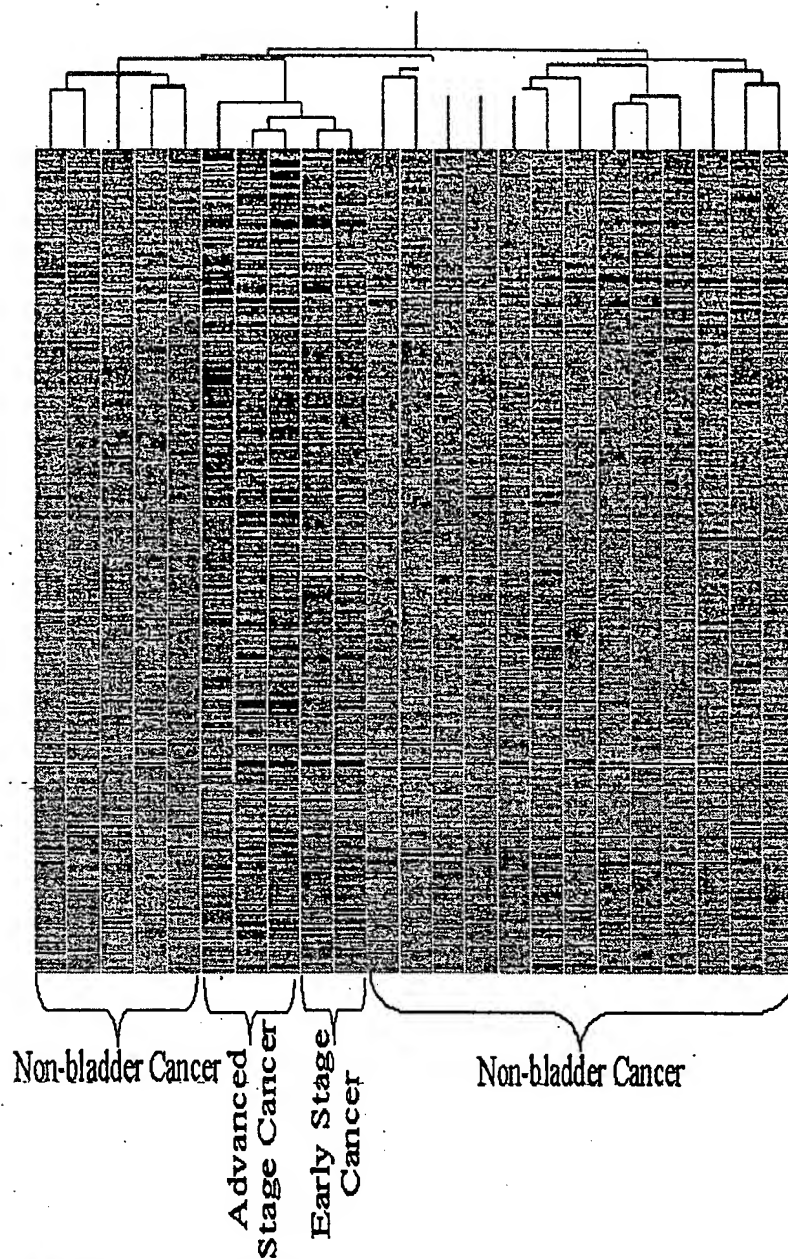
Bladder Cancer: 5

Non-bladder Cancer: 18

Differentially Expressed Genes ($p < 0.05$): 4,228

Figure 18

Bladder
Cancer



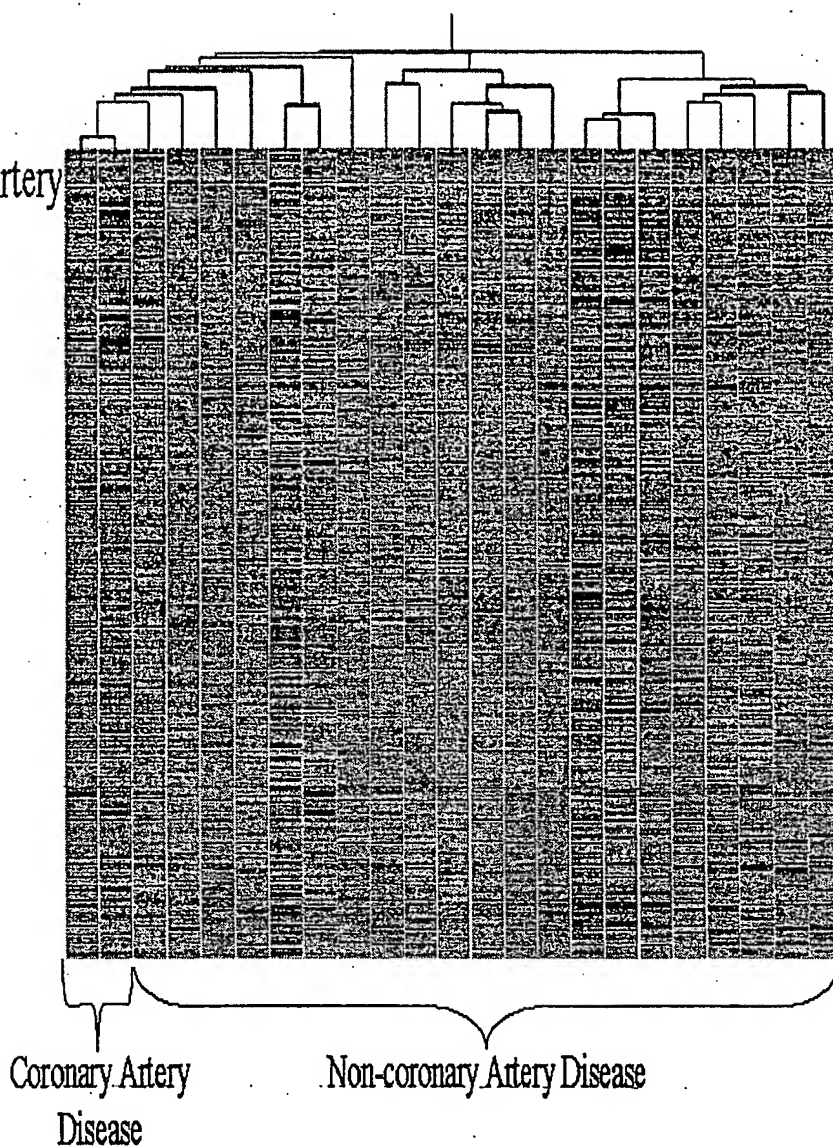
Bladder Cancer: 3 advanced stage, 2 early stage

Non-bladder Cancer: 18

Differentially Expressed Genes ($p < 0.05$): 3,518

Figure 19

Coronary Artery
Disease

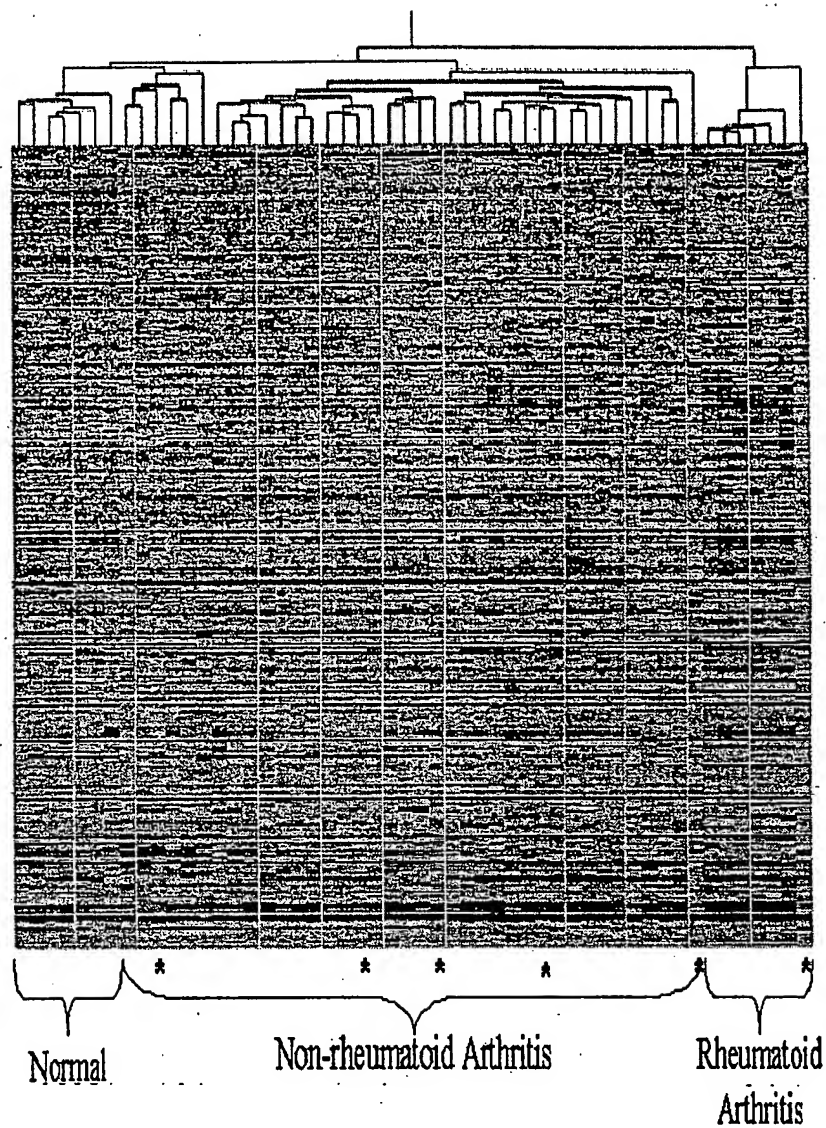


Coronary Artery Disease: 2

Non-coronary Artery Disease: 21

Differentially Expressed Genes ($p < 0.05$): 967

Figure 20
Rheumatoid
Arthritis



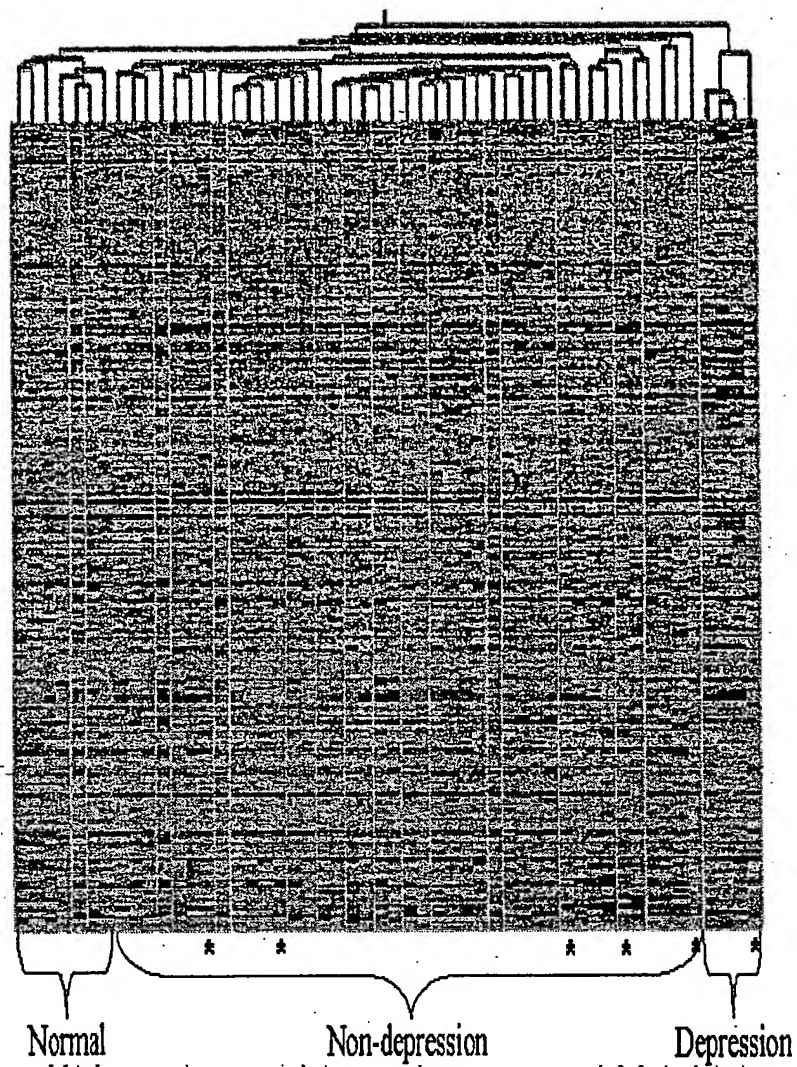
Rheumatoid Arthritis: 6

Non-rheumatoid Arthritis: 34

Normal: 12

Differentially Expressed Genes ($p < 0.05$): 2,068

Figure 21
Depression



Depression: 3

Non-depression: 37

Normal: 12

Differentially Expressed Genes ($p < 0.05$): 941

Figure 22
Osteoarthritis

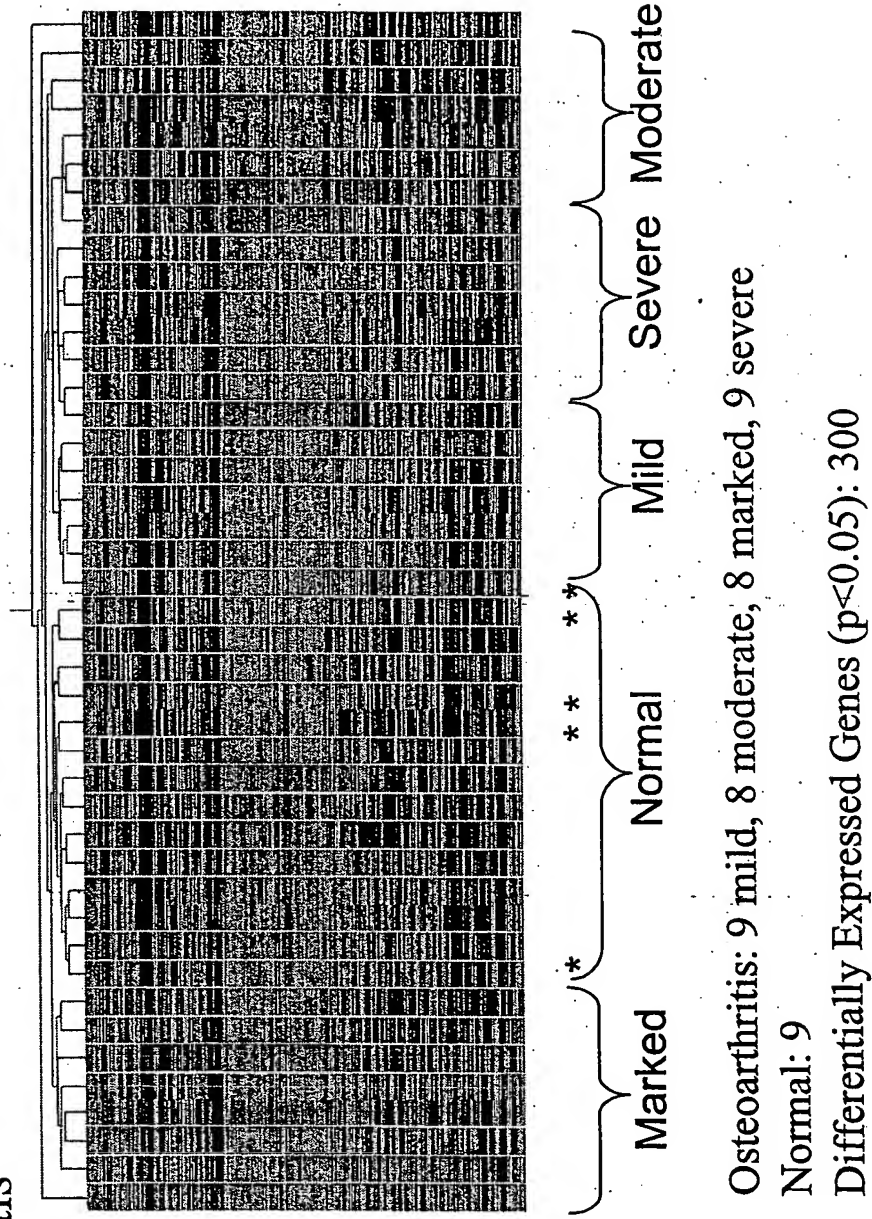


Figure 24

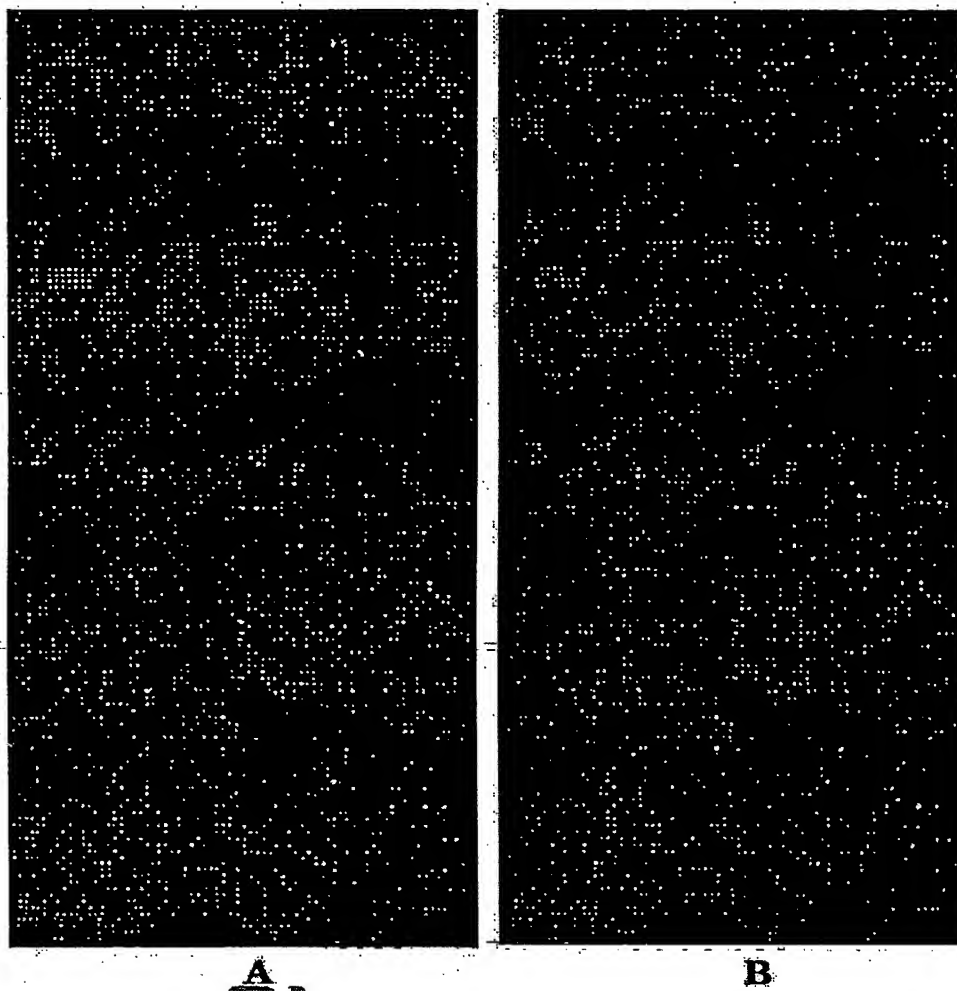
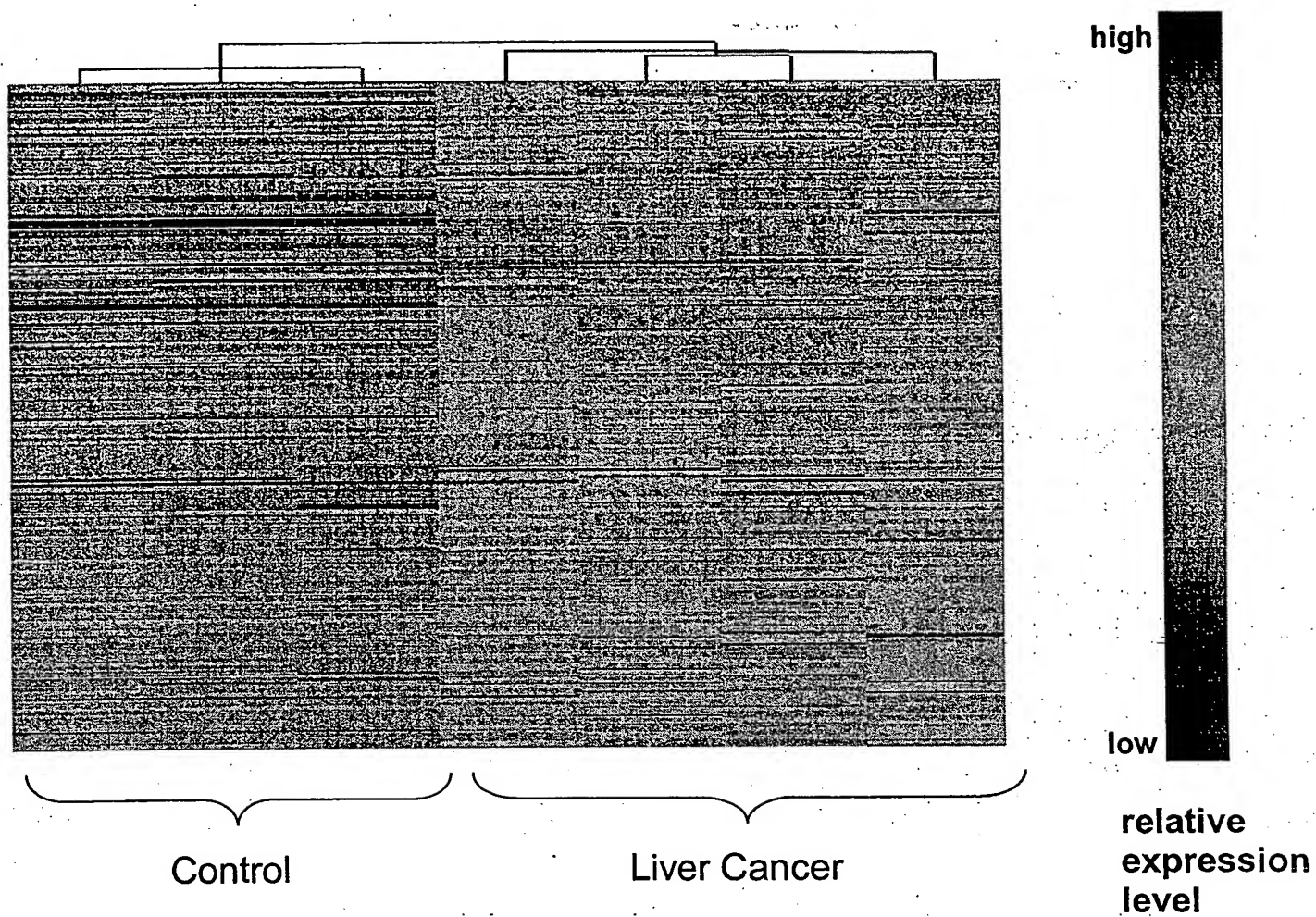


Figure 25

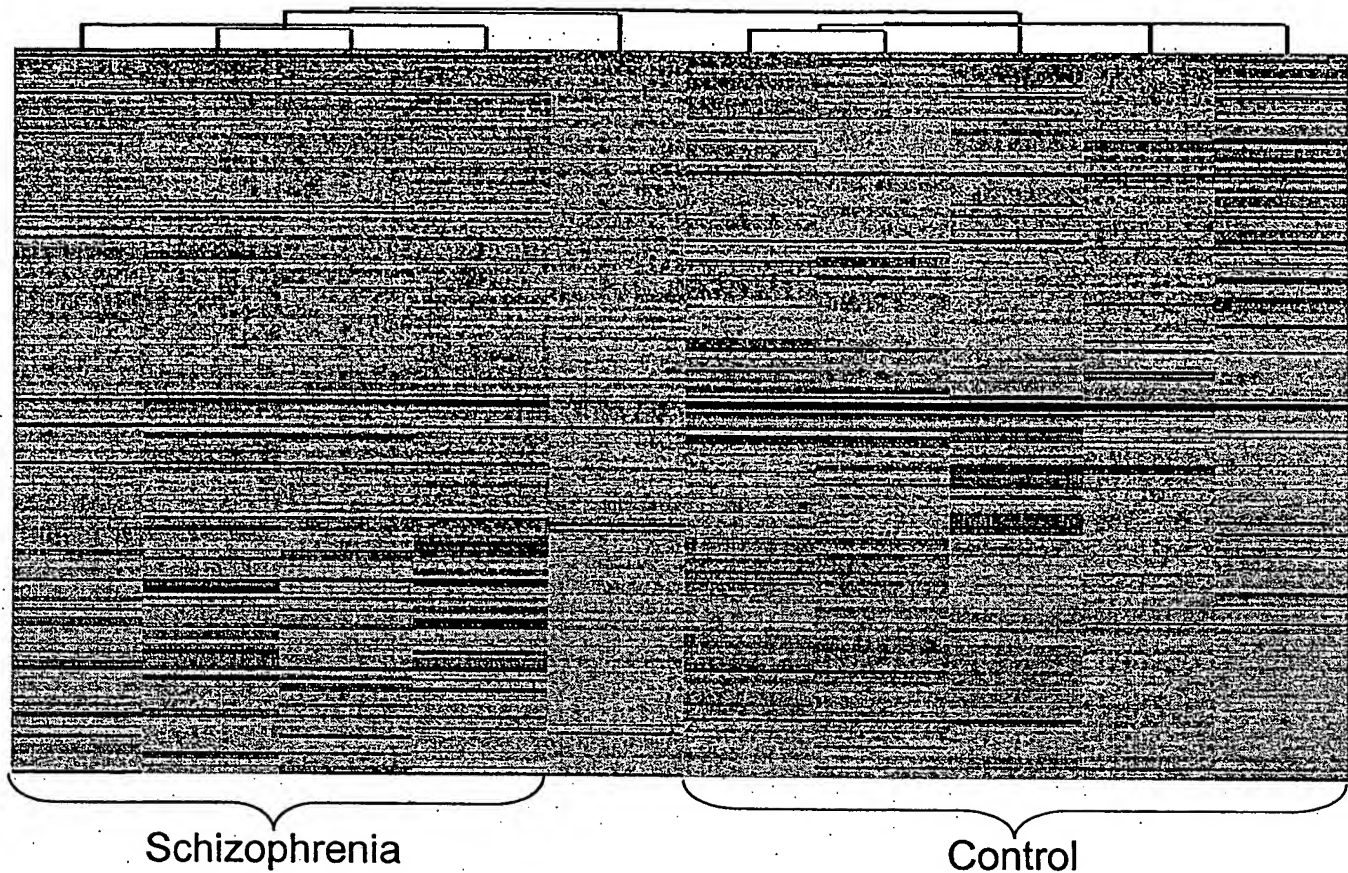
Liver Cancer



Control (red): n=3; Liver Cancer (orange): n=4

Figure 26

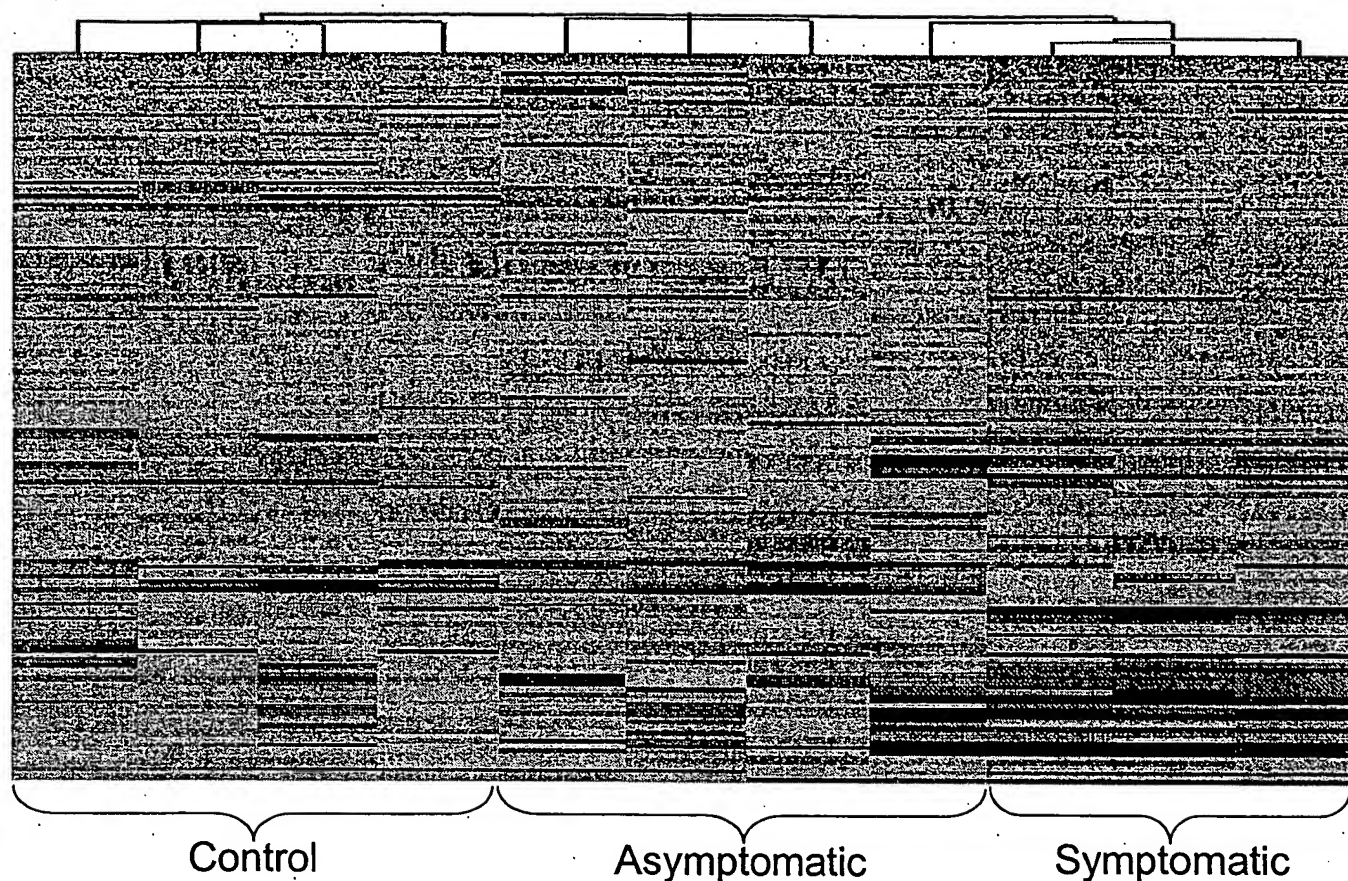
Schizophrenia



Control (red): n=6; Schizophrenia (orange): n=4

$p < 0.005$
252 genes

Figure 27
Chagas Disease

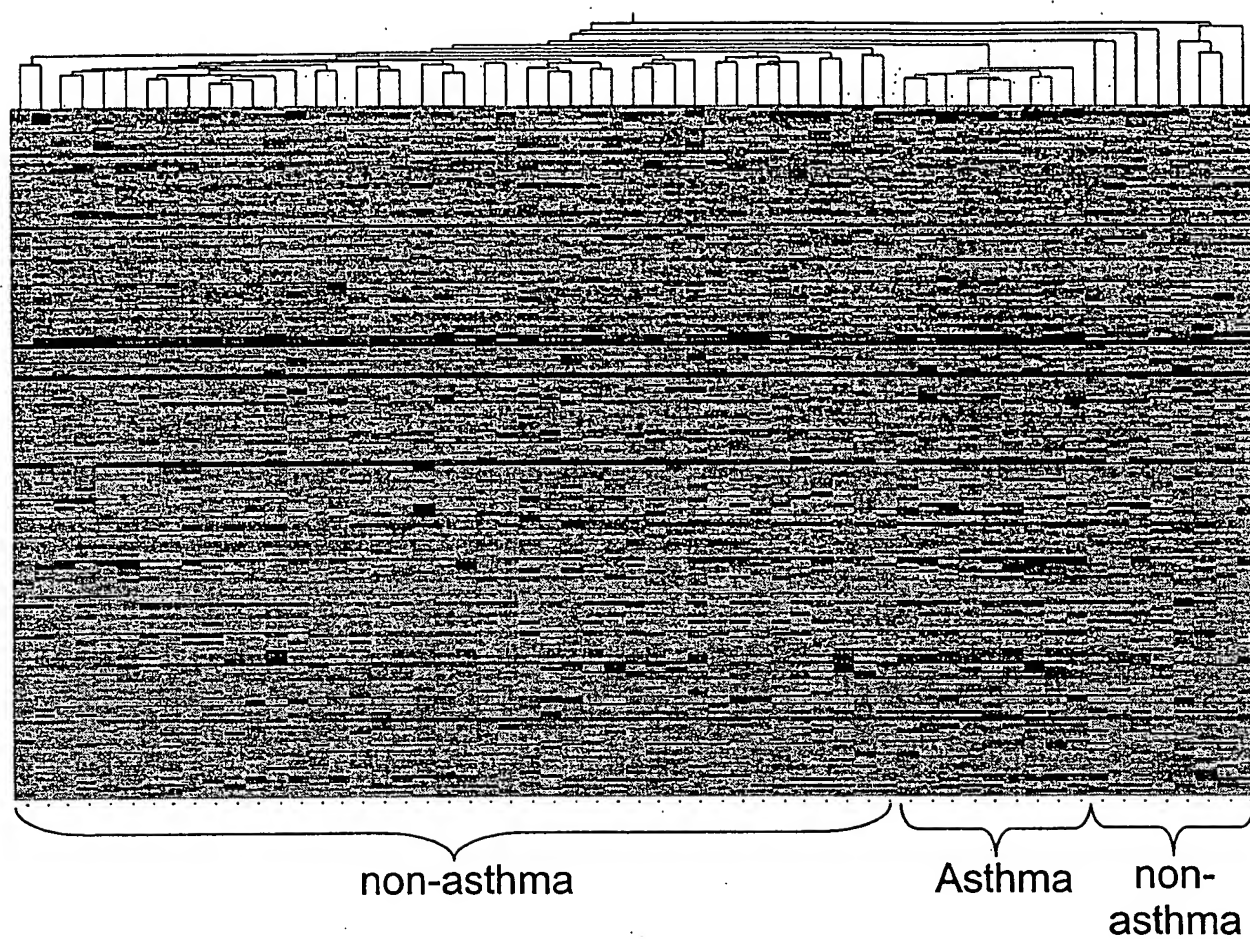


Control (orange): n=4; Chagas' asympt. (red): n=4;
Chagas' sympt. (yellow): n=3

$p < 0.01$
155 genes

Figure 28

Asthma



Asthma: n=9 Non-asthma: n=50

$p < 0.05$
219 genes

Figure 29

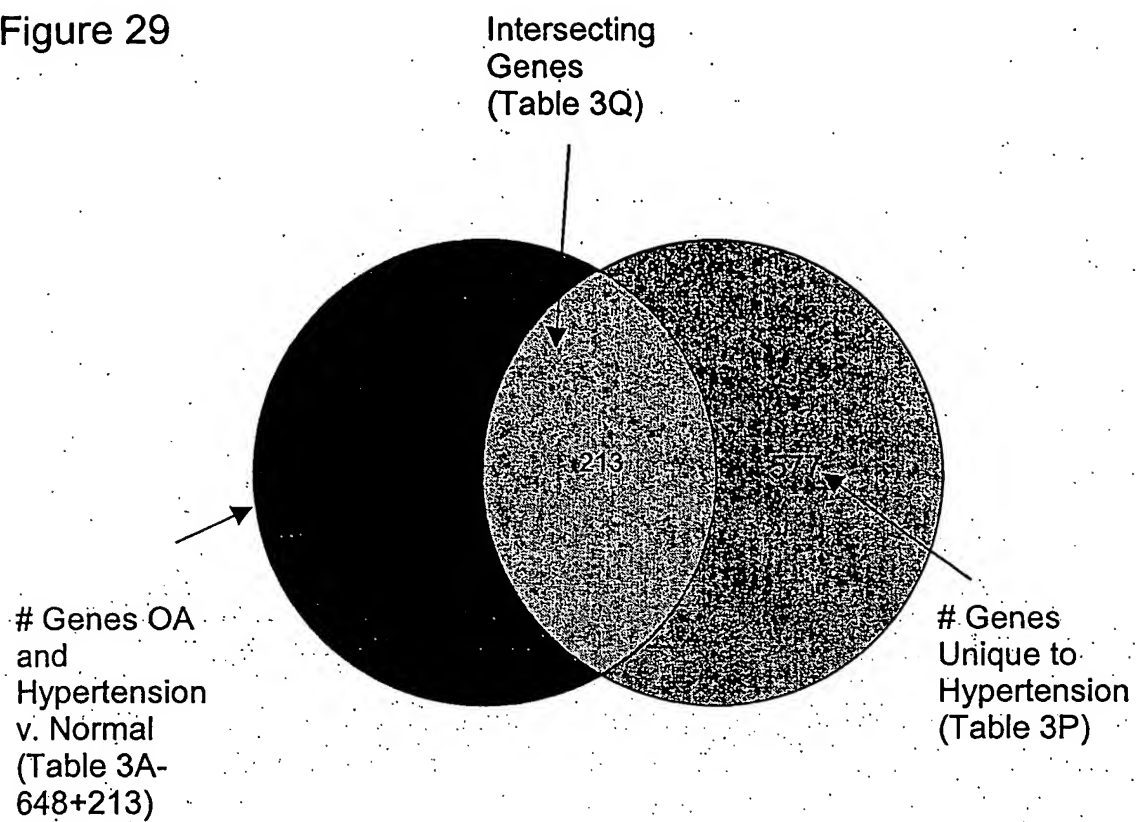


Figure 30

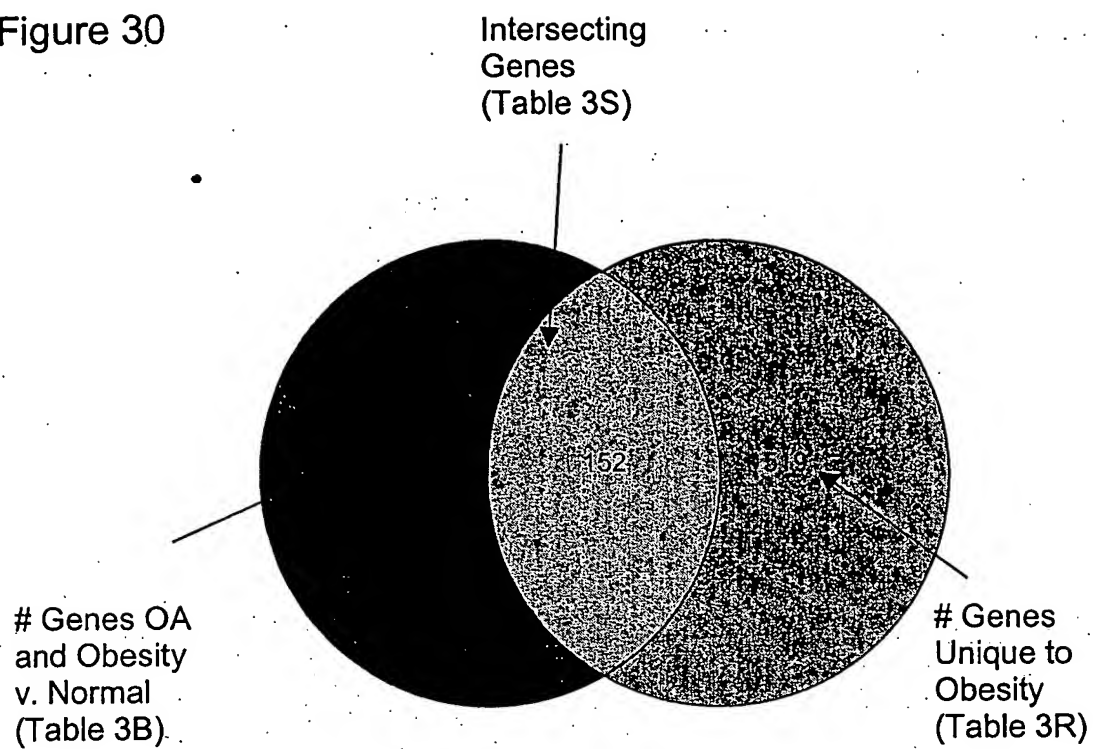


Figure 31

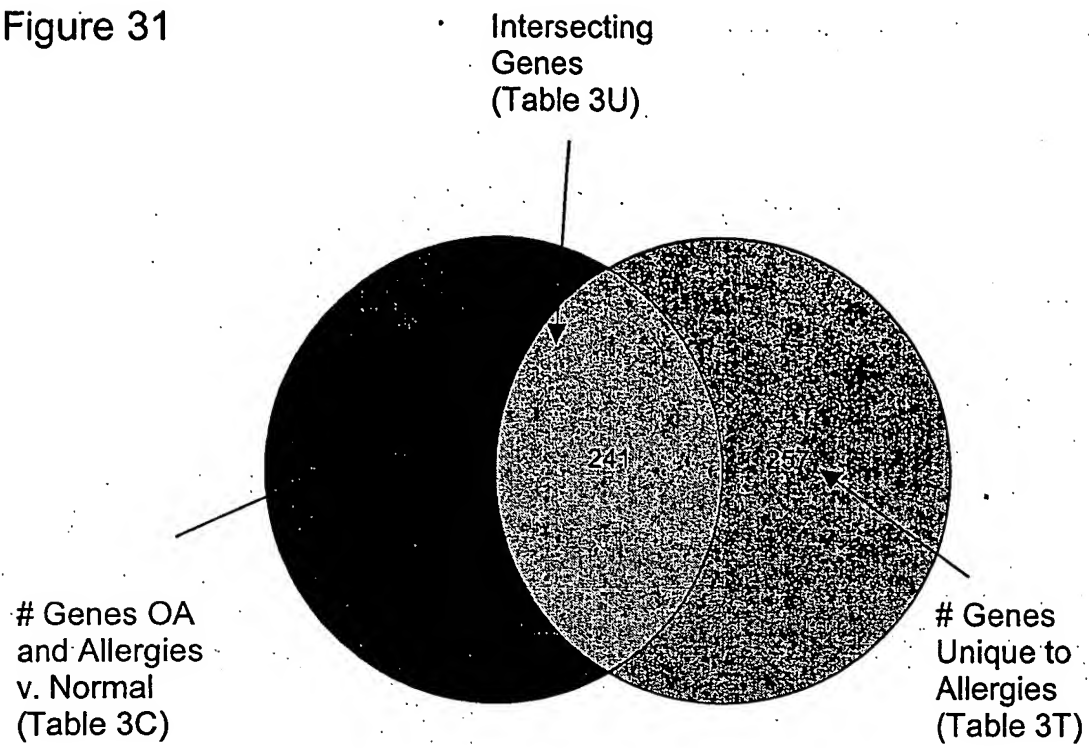


Figure 32

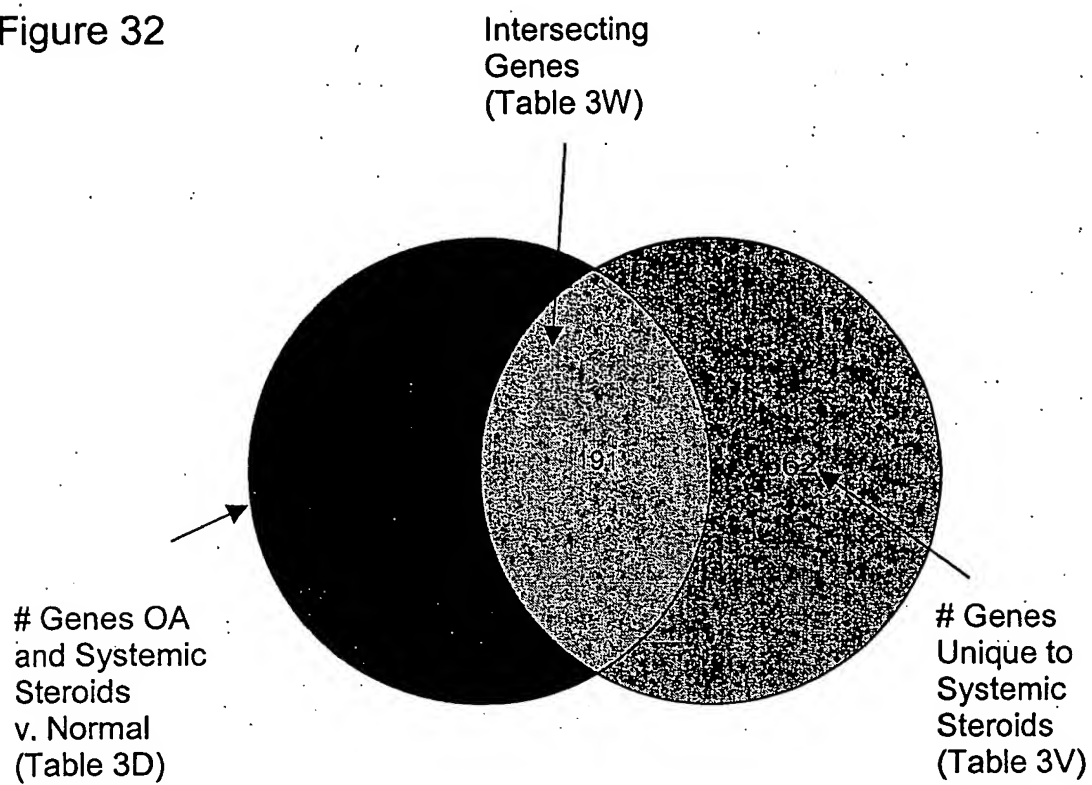
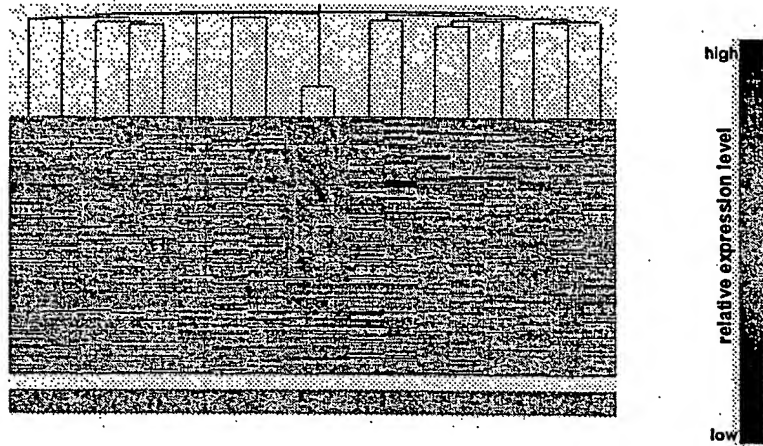


Figure 33

Schizophrenia, Batch 2 vs. MDS



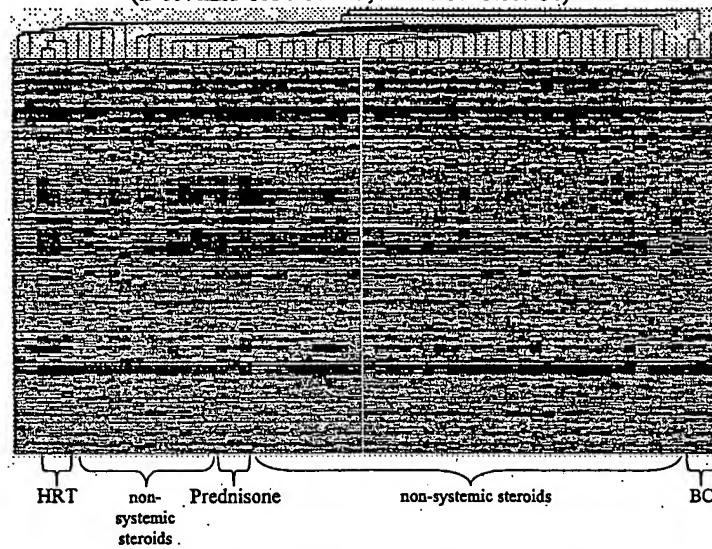
$p < 0.05$
294 genes

Schizophrenia (yellow): $n=16$; MDS (blue): $n=2$

MDS = Manic Depression Syndrome

Figure 34

OA Blood Samples Co-morbidities Study: Systemic Steroid Groups
(n=59: mild OA blood-29, severe OA blood-30)



Systemic Steroids (n=9): 3 prednisone, 3 birth control, 3 hormone replacement therapy

Non-systemic steroids: 50

Differentially Expressed Genes ($p < 0.05$): 396

HRT = hormone replacement therapy; BC = birth control